

Rangitatahi seabird research: Dec 2017

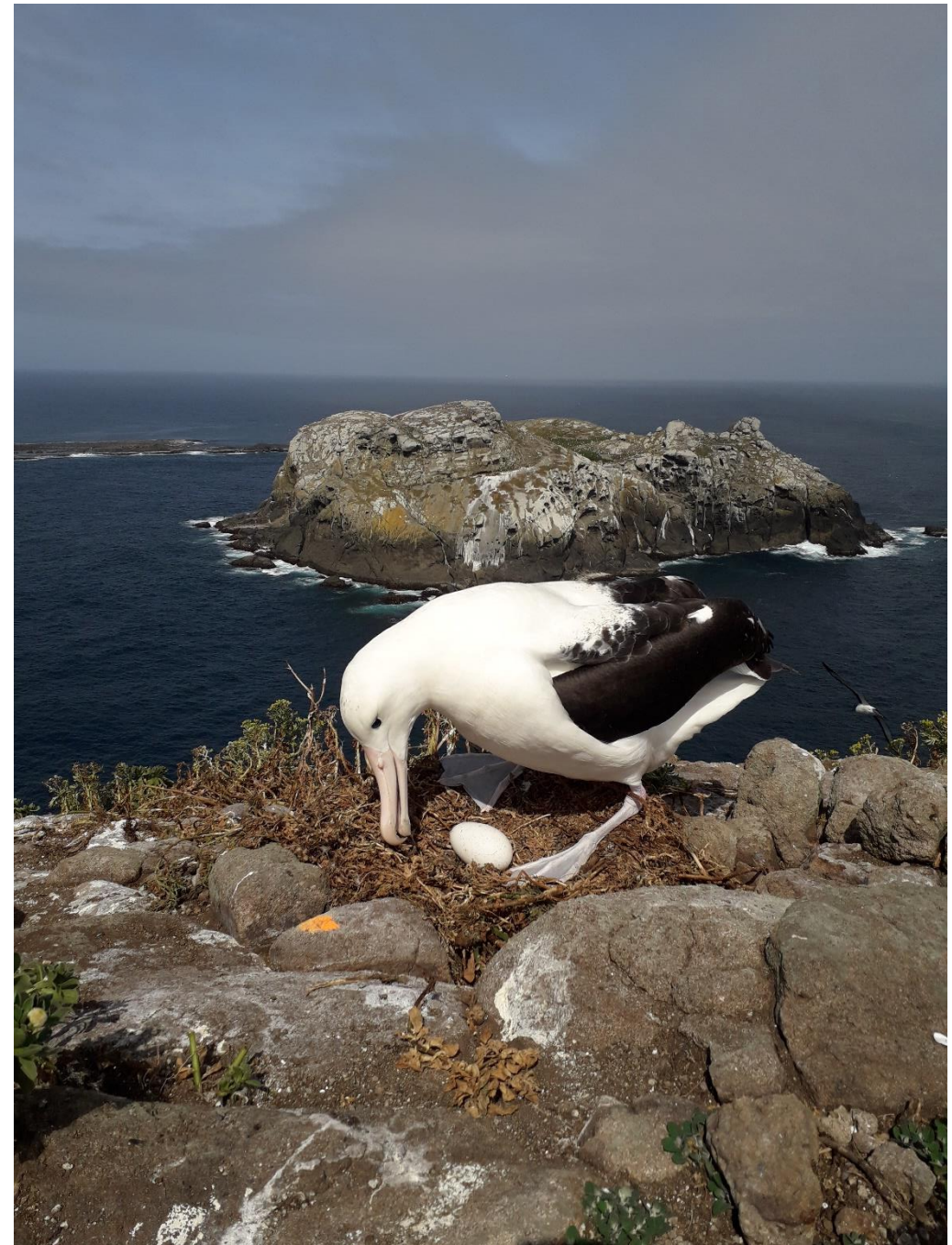


25 YEARS OF WILDLIFE CONSERVATION

Rangitatahi Seabird Research

Continuation of research on Te Tara Koi Koia and Motuhara last season

- Northern Buller's Mollymawk
- Northern Giant Petrel
- Northern Royal Albatross



Rangitatahi field trip

- Thanks to the Island owners for granting permission to camp on the island
- Nov 30-Dec 4th 2017, camping on Middle and Big Sister at same time.
- Island in excellent condition – although signs of plant stress due to dry spring conditions



Northern Buller's Mollymawk

- Full census of both island
 - Middle Sister – 753 nests
 - Big Sister – 2,520 nests
 - Total - 3,273 nests
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- Counts higher than previous estimates for both islands



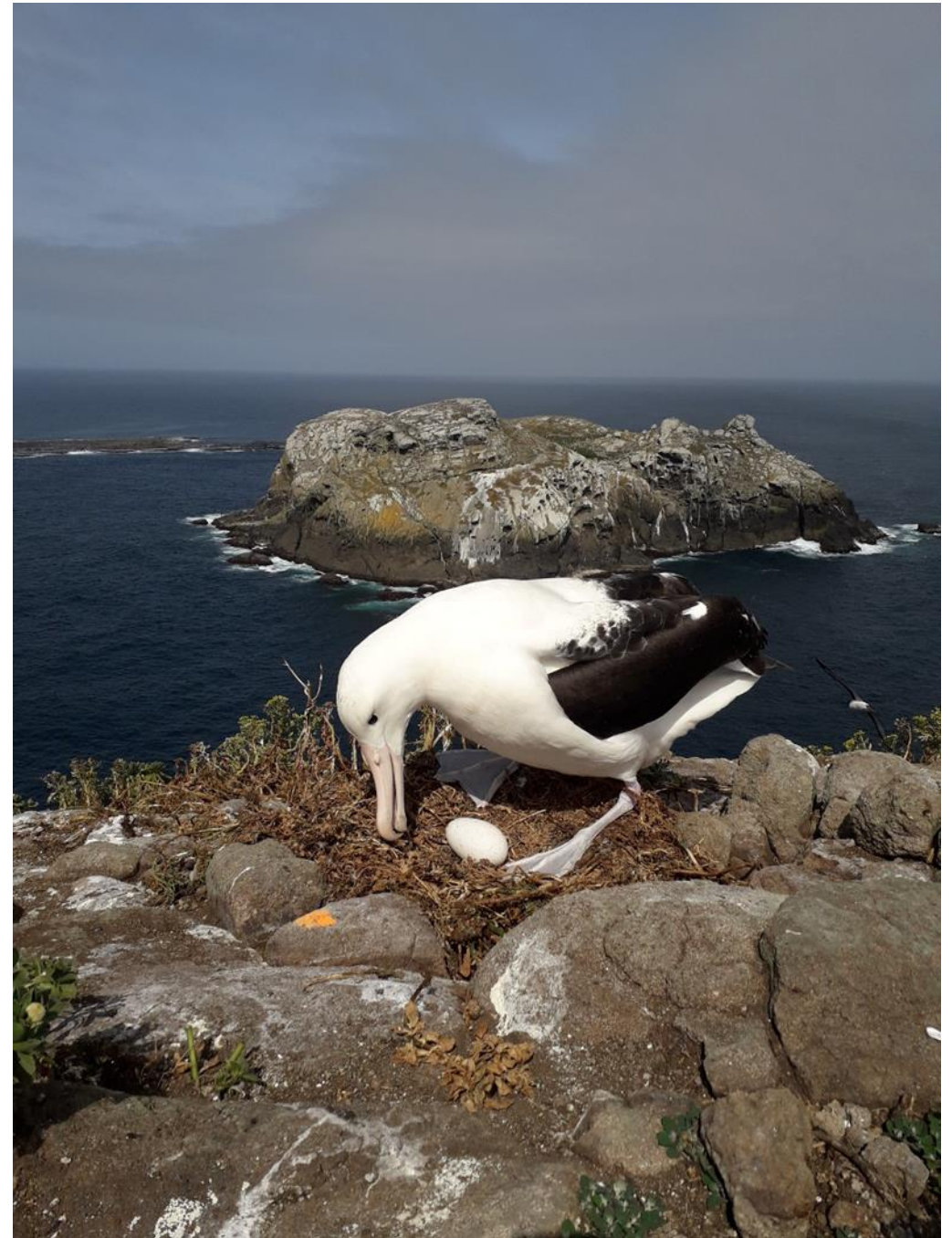
Northern Giant Petrel

- Full census both islands
 - Middle Sister – 110 breeding pairs
 - Big Sister – 46 breeding pairs
 - Total 156 breeding pairs
-
- No previous island wide census to determine trends

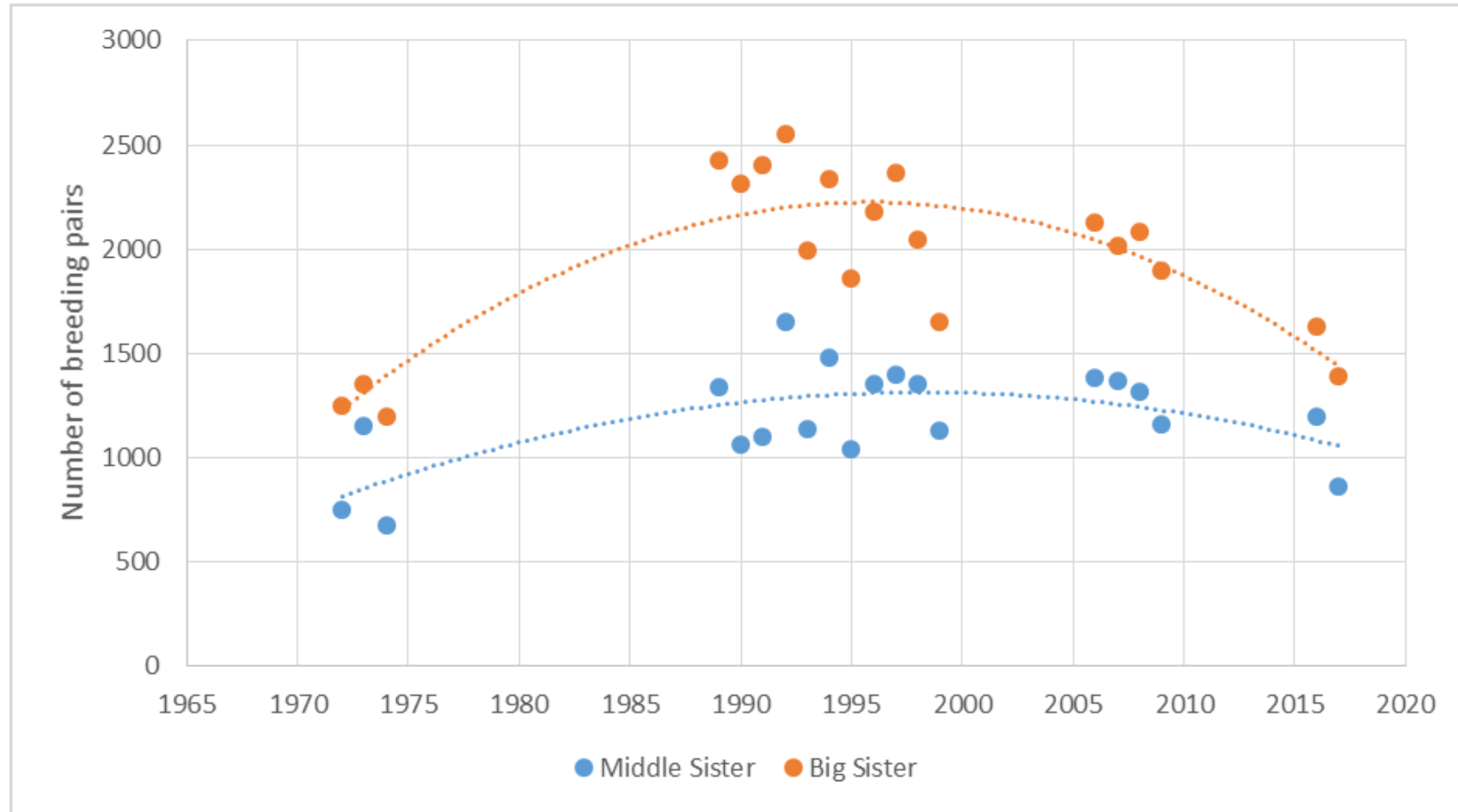


Northern Royal Albatross

- Full census both islands
- Middle Sister – 864 breeding pairs
- Big Sister – 1,391 breeding pairs
- Total – 2,255 breeding pairs



Rangitatahi historical counts



Annual breeding pairs, see report for data sources

Chatham Seabird Research outcomes

- Two years research with landings on all albatross islands
- Additional research – aerial surveys
- Key findings for three species –
 - Buller's Mollymawk
 - Giant Petrel
 - Royal Albatross



Northern Buller's Mollymawk

- Rangitatahi – 3,158 pairs
- Motuhara – 16,764 pairs (2016)
- Total Chatham Island population – 20,000 pairs
- Higher than usually quoted.
- Aerial surveys underestimate population with ground counts best for this species.



Northern Giant Petrel

- Rangitatahi – 156 pairs
- Motuhara – 1,977 pairs (2016)
- Total Chatham Island population – 2,150 pairs
- Similar to usually quoted.

- Aerial surveys underestimate population with ground counts best for this species.



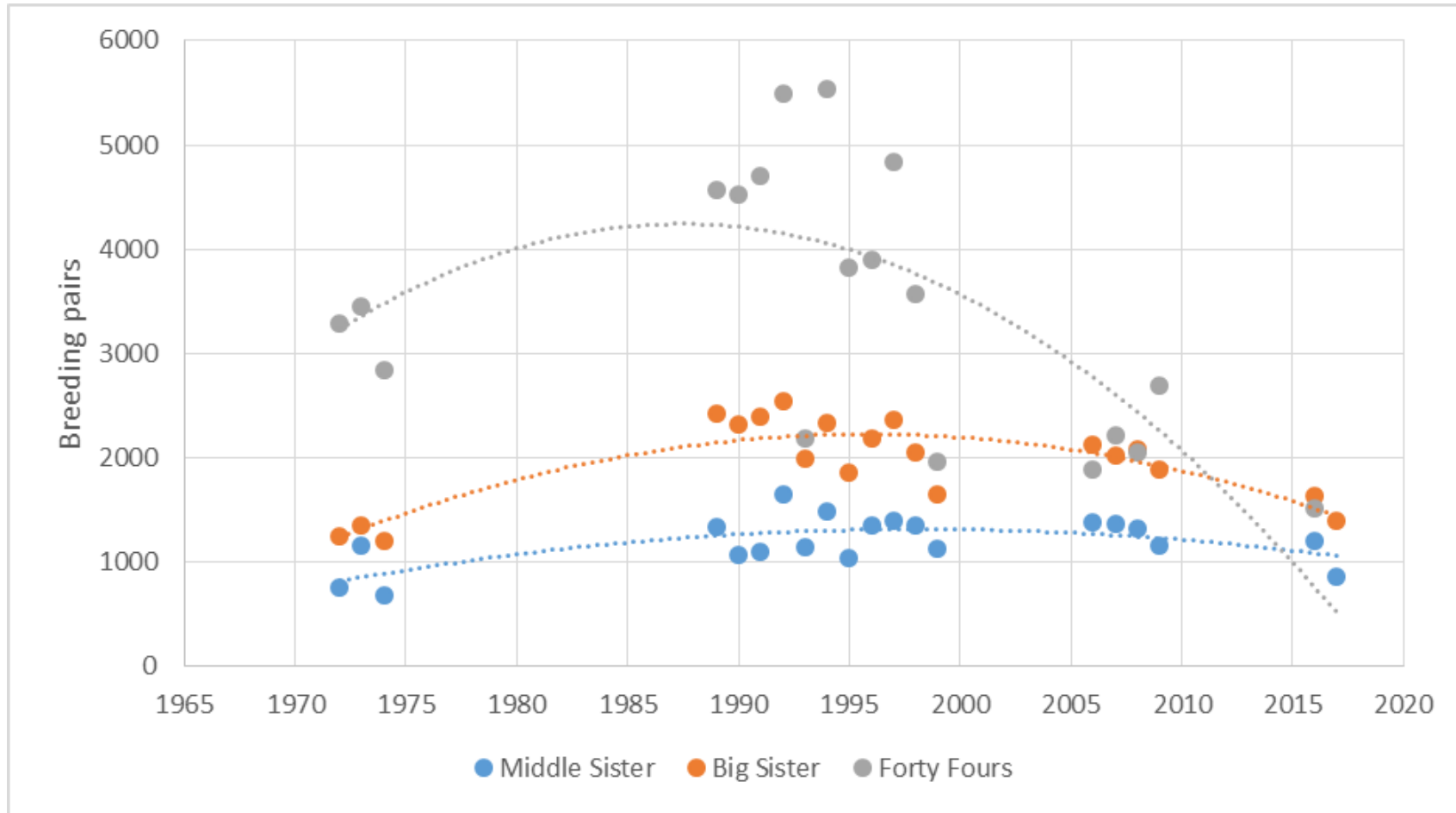
Northern Royal Albatross

- Rangitatahi -2,255 pairs
- Motuhara – 1,521 pairs (2016)

- Counts marginally down on Rangitatahi and significantly lower on Motuhara



Annual breeding pairs



Annual breeding pairs, see report for data sources

Northern Royal Albatross

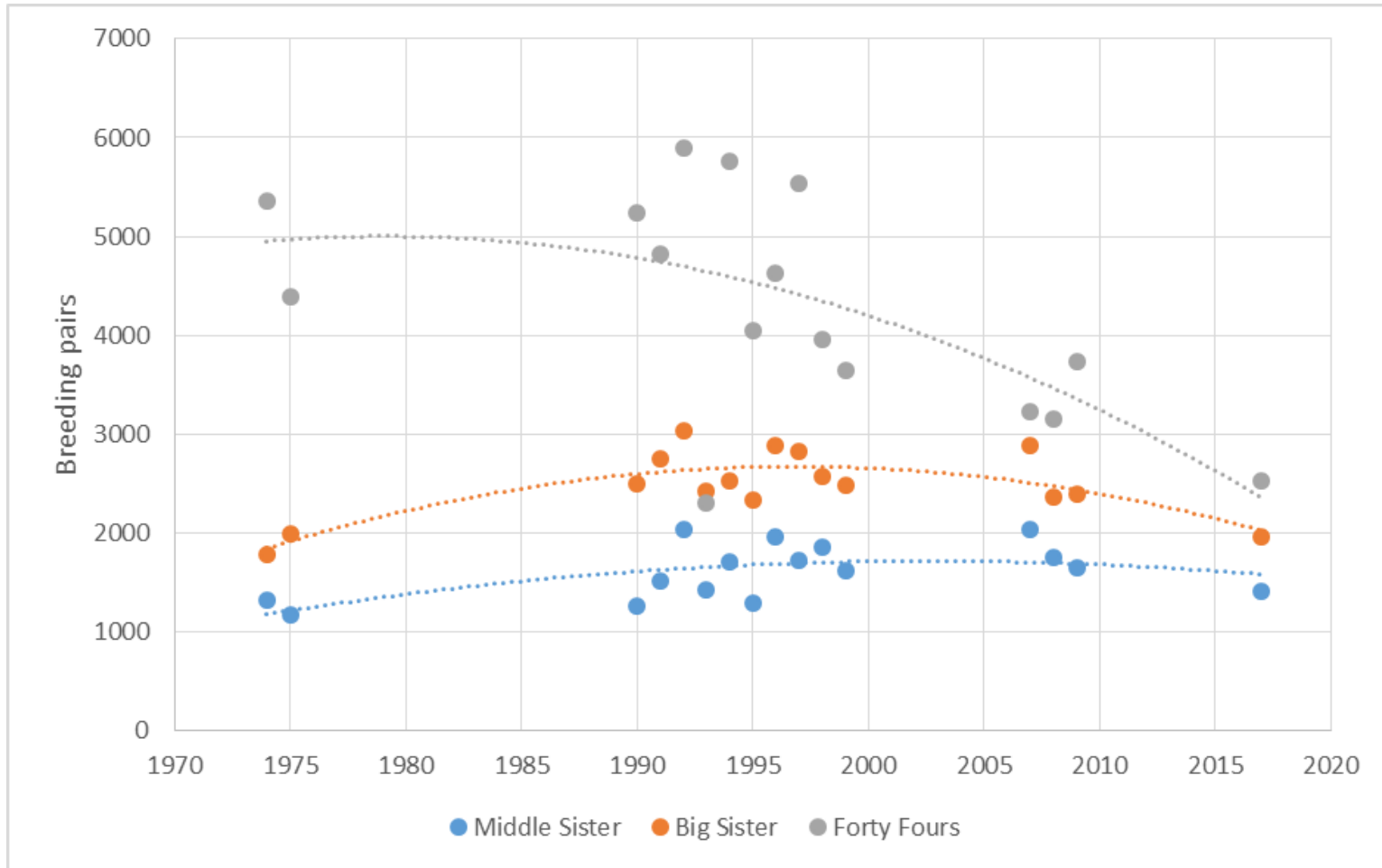
- However population trends need to account for biennial breeding

Total
Population
(pairs) = The number of
breeding pairs +

The number of
fledged chicks
in the
preceding
breeding
season

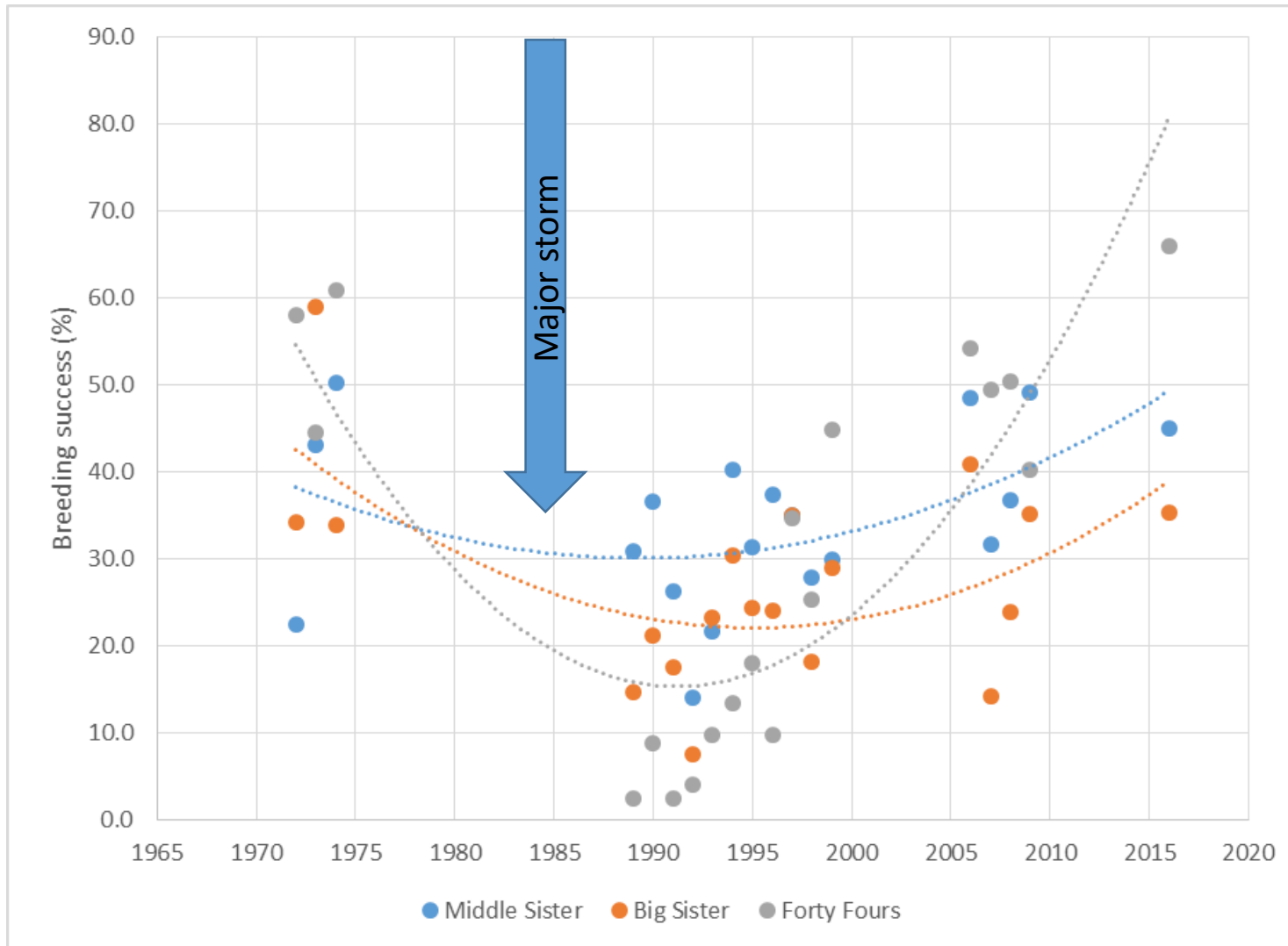


Total population



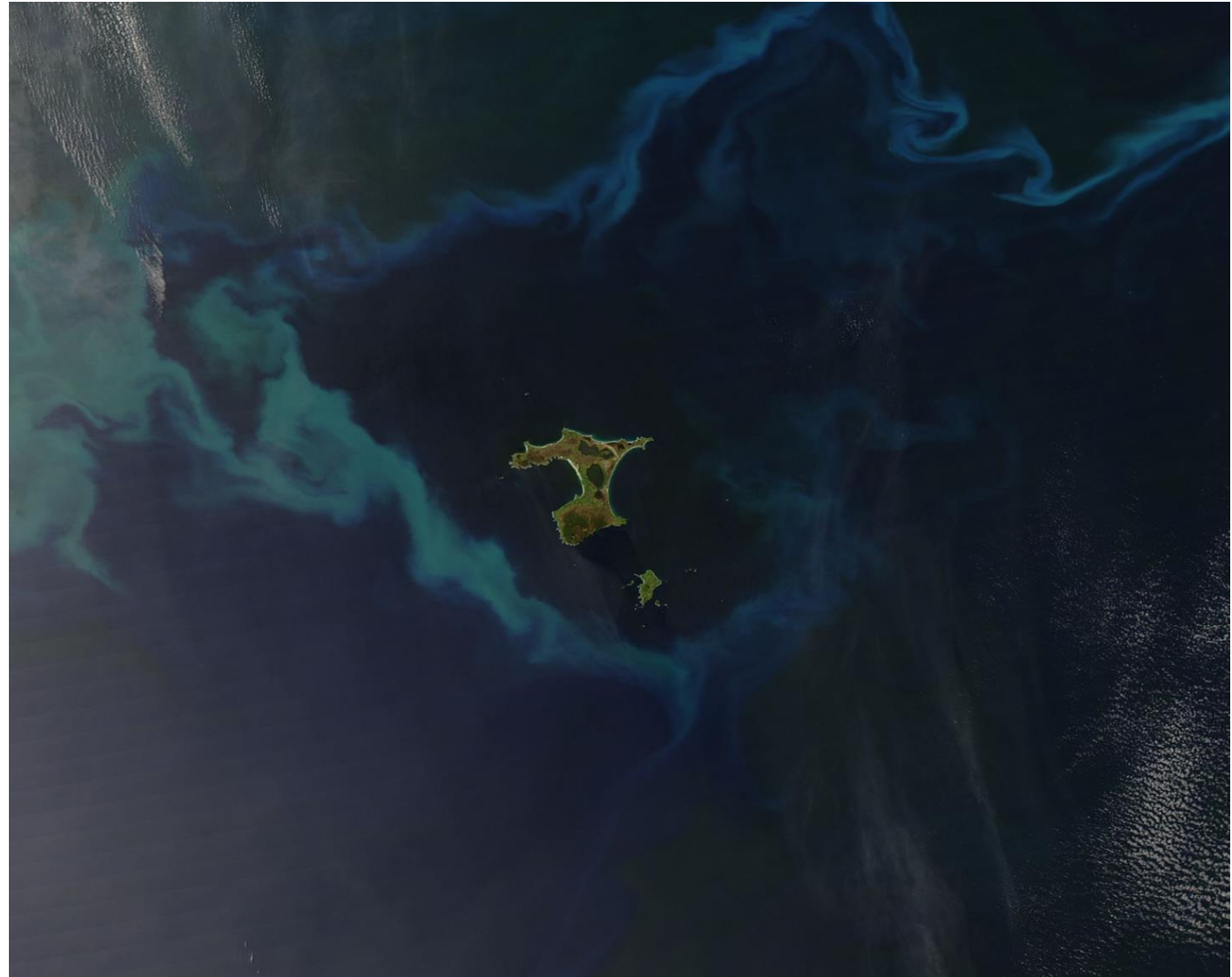
Total biennial breeding population (pairs), see report for data sources and full discussion on methodology

Causes – low breeding success following 1984 storm?



Other causes – at sea effects?

- Poor juvenile survival and recruitment?
- Recent decline in adult survival?



Recommendations

- Concern over Northern Royal Albatross
- Continue research - aerial surveys vs ground counts
- Start a demographic study on Northern Royals, especially on Motuhara
- Start chick cohort banding



Acknowledgements

- Rangitatahi owners; especially George Goomes and Joss Thomas
- Chris Morrison for boat transport
- Kris Ramm and Graeme Taylor
- Peter Frost

